

Amendment  
10/681, 936

5000-1-455

**REMARKS**

Entry of this amendment, reconsideration of all grounds of rejection in the Office Action, and allowance of the claims are respectfully requested in view of the above amendment and the following remarks. Claims 1-10 are pending in the application, and claims 5-10 have been withdrawn from consideration due to the restriction requirement. Claims 1 and 2 have been amended to overcome rejection under 35 U.S.C. §112, first paragraph, and claims 1-3 have been amended to clarify the UWB networks have an optical input and output that are optically cascaded, and a signal converter for optical conversion of a first portion of the UWB for transmission to a picocell, and an optical second portion for transmission to another UWB network, which further divides the optical second portion into additional portions of the signal, and sends part of the second portion of the optical signal to another UWB for intended recipient picocells in another UWB network; support is shown in FIG. 3 and disclosed at page 6, line 15 to page 7, line 7, page 4, line 22 to page 5, line 1.

Claims 1-4 stand rejected under 35 USC § 112, 1<sup>st</sup> paragraph, as allegedly failing to comply with the enablement requirement. Claims 1-4 stand rejected under 35 USC § 103,(a) as allegedly being obvious over Imajo (US 6,337,754 B1) in view of Deas (US Pat Appl. Pub. No. 2004/0175173 A1). Applicants respectfully traverse these grounds of rejection for the reasons indicated herein below.

With regard to the rejections under 35 U.S.C. §112, 1<sup>st</sup> paragraph, Applicant has amended claims 1 and 2 such that the claims distinguish between an optical transmission from another UWB network and/or the central station to the signal converter via the optical signal transmission means, and the downstream and upstream transmission from the picocell are UWB

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electrical signals back to the signal converter. Applicant has also amended the terminology regarding the ports to communication between the signal transmission apparatus, and not directly from picocells, as the ports are for transmission of optical signals and the picocells communicate via UWB signals.

With regard to the rejections under 35 U.S.C. §103(a) over the combination of Imajo and Deas, Applicant respectfully submits that the combination fails to disclose or suggest any of claims 1-4. First, with regard to the combination of Imajo and Deas, Applicant respectfully submits that Imajo discloses an optical system used to provide wireless signals in areas where there are typically RF dead spots, such as tunnels, subways, etc. by using a leaky coaxial cable 6A, 6B, or a physical antenna 35A, 35B. Imajo discloses separate paths for transmission to a first fixed relay station and back from a first relay system, and fails to disclose a plurality of optically cascaded UWB networks having optical communications to/from a central station.

Similarly, Deas merely discloses a UWB transmitter that receives optical signals, but in combination with Imajo, fails to disclose or suggest a plurality of UWB networks receiving optical transmission to extend the useful range of UWB.

Accordingly, the combination of Imajo and Deas fails to disclose or suggest a transmission apparatus for a plurality of UWB networks, as the combination of references fails to disclose or suggest optically cascading a plurality of UWB networks.

With regard to the rejection of claims 1-4 under 35 U.S.C. §103(a), we note that the United States Court of Appeals for the Federal Circuit required a showing of an unrebutted prima facie case of obviousness (*In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998) (citing *In re Deuel*, 51 F.3d 1552, 1557, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995))). According to United States Court of Customs and Patent Appeals, the predecessor to the Federal

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Circuit, the *prima facie* case can be established only if the prior art references, among others, teach all features in the claims (*In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1970); see also MPEP 2143.03), or if the claim or claims recite features as combined in the claims that would have been within the ordinary skill in the art (*KSR International Co. v. Teleflex Inc. et al.*, No. 04-1350, U.S. Supreme Court, decided April 30, 2007).

For at least the above reasons, the combination of Imajo and Deas fails to disclose or suggest a plurality of an optically cascaded UWB networks as claimed in the present invention. Nor are these claims within the level of ordinary skill in the art alone, or in view of Imajo and Deas. Reconsideration and withdrawal of this ground of rejection are respectfully requested.

The other claims in this application (claims 2-4) are each dependent from independent claim 1 discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

For all the foregoing reasons, it is respectfully submitted that all of the present claims are patentable in view of the cited reference. A Notice of Allowance is respectfully requested.

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Should the Examiner deem that there are any issues which may be best resolved by telephone communication, please contact Applicant's undersigned Attorney at the number listed below.

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